Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the

application:

Listing of Claims:

1.   (currently amended) A method for detecting dropped packets in a network including a packet switched network, the method comprising:

establishing a telephonic connection between a first network location and a second network location;

transmitting at least one set of N waveforms from the first network location, each transmitted waveform including a waveform characteristic operative to assign a predetermined value relative to other waveforms in the at least one set, such that a predetermined sequence of values are assigned to packets carrying the N transmitted waveforms;

receiving at least one telephonic signal at the second network location via [[the]] a communications channel;

processing the at least one telephonic signal to obtain a received sequence of values; and

comparing the received sequence of values to the predetermined sequence of transmitted values to detect dropped packets without having access to packet switched network control data.

2.   (original) The method of claim 1, wherein the representative waveform characteristic is a peak power level.

3.   (original) The method of claim 1, wherein the representative waveform characteristic is an average power level.

2

4.   (original) The method of claim 1, wherein each waveform in the set of N waveforms includes a representative waveform characteristic corresponding to one of N peak power levels.

5.   (original) The method of claim 4, wherein each of N peak power levels corresponds to a value between 0 and N, such that the predetermined sequence of values is 1, 2,..., N.

6.   (original) The method of claim 1, wherein the transmitted set of N waveforms comprise a single waveform having a monotonically increasing or decreasing power level.

7.   (original) The method of claim 1, wherein each waveform includes a first segment and a second segment.

8.   (original) The method of claim 7, wherein the second segment includes the representative waveform characteristic.

9.   (original) The method of claim 1, wherein each predetermined value includes a predetermined bit pattern.

10.   (original) The method of claim 1, where in the representative waveform characteristic is a waveform corresponding to a CELP symbol.

11.   (original) The method of claim 1, wherein the representative waveform characteristic includes a frequency of the waveform.

12.   (original) The method of claim 1, wherein the representative waveform characteristic includes a number of phase changes present in a segment of the waveform.

13.   (original) The method of claim 1, wherein the representative waveform characteristic includes a semantically encoded waveform.

14.   (original) The method of claim 1, wherein the step of processing includes the step of dividing the at least one telephonic signal into received waveform sections having a duration substantially identical to the transmitted waveform.

15.   (original) The method of claim 14, wherein the step of processing further comprises:

analyzing each received waveform section to extract a received waveform characteristic;

assigning each received waveform section a received value based on the received waveform characteristic; and

generating a sequence of received values based on the step of assigning to obtain the received sequence of values.

16.   (original) The method of claim 15, wherein a deviation between the predetermined sequence of values and the sequence of section values corresponds to a dropped packet.

17.   (original) The method of claim 16, wherein a deviation between the predetermined sequence of values and the sequence of section values includes a missing section value, the missing section value corresponding to a dropped packet.

18.   (original) The method of claim 16, wherein a deviation between the predetermined sequence of values and the sequence of section values includes a repetition of at least one section value, the repetition corresponding to a dropped packet.

19. (original) The method of claim 16, wherein a deviation between the predetermined sequence of values and the sequence of section values includes a repetition of at least one section value, the repetition indicating a packet loss concealment routine operating in the packet switched network.

20. (original) The method of claim 14, wherein the step of processing further comprises:

comparing each received waveform section to a plurality of CELP waveform patterns;

assigning a symbol number to the received waveform section based on the step of comparing each received waveform section; and

generating a sequence of received values using the symbol numbers of the received waveform sections, to thereby obtain the received sequence of values.

21. (original) The method of claim 14, wherein the step of processing further comprises:

comparing each received waveform section to a plurality of semantically encoded waveform patterns;

assigning a bit-pattern to the received waveform section based on the step of comparing each received waveform section; and

generating a sequence of section values using the bit-pattern of the received waveform sections, to thereby obtain the received sequence of values.

22. (original) A system for detecting dropped packets in a telecommunications network including a packet switched network, the system comprising:

a transmission unit configured to send at least one set of N waveforms over the telecommunications network, each transmitted waveform including a waveform characteristic operative to assign a predetermined value relative to other waveforms in the at least one set, such

that a predetermined sequence of values are assigned to packets carrying the N transmitted waveforms; and

a receiver unit operative to receive a telephonic signal from the telecommunications network, the receiver also being configured to derive a received sequence of values from the telephonic signal, and compare the received sequence of values to the predetermined sequence of values to detect dropped packets, without having access to packet switched network transmission control data.

23.   (original) The system of claim 22, wherein the transmission unit further comprises:

a computer-readable medium for storing data representing the at least one set of N waveforms;

a processor coupled to the computer readable medium, the processor being programmed to retrieve the data from the computer readable medium; and

a codec device for converting the data into a signal suitable for transmission over the telecommunications network.

24.   (original) The system of claim 22, wherein the receiver unit further comprises:

a computer-readable medium;

a codec device for converting a received telephonic signal into digitized data suitable for storing in a file in the computer-readable medium; and

a processor programmed to,

divide the digitized data in the file into received waveform sections,

analyze each received waveform section to extract a received waveform characteristic,

assign each received waveform section a received value based on the received waveform characteristic, and

generate a sequence of received values based on the step of assigning, to thereby obtain the received sequence of values.

25.   (original) The method of claim 24, wherein a deviation between the predetermined sequence of values and the sequence of section values corresponds to a dropped packet.

26.   (original) The method of claim 25, wherein a deviation between the predetermined sequence of values and the sequence of section values includes a missing section value, the missing section value corresponding to a dropped packet.

27.   (original) The method of claim 24, wherein a deviation between the predetermined sequence of values and the sequence of section values includes a repetition of at least one section value, the repetition corresponding to a dropped packet.

28.   (original) The method of claim 24, wherein a deviation between the predetermined sequence of values and the sequence of section values includes a repetition of at least one section value, the repetition indicating a packet loss concealment routine operating in the packet switched network.

29.   (original) The system of claim 24, wherein the processor is further configured to:
compare each received waveform section to a plurality of CELP waveform patterns;

assign a symbol number to the received waveform section based on the step of comparing each received waveform section; and

generate a sequence of section values using the symbol numbers of the received waveform sections.

30.   (original) The system of claim 29, wherein a section waveform characteristic is a waveform corresponding to a CELP symbol.

31.   (original) The system of claim 24, wherein the signal processor is further configured to:

compare each received waveform section to a plurality of semantically encoded waveform patterns;

assign a bit-pattern to the received waveform section based on the step of comparing each received waveform section; and

generate a sequence of section values using the bit-pattern of the received waveform sections.

32.   (original) The system of claim 31, wherein a section waveform characteristic is a semantically encoded waveform.

33.   (currently amended) A computer-readable medium having computer-executable instructions for performing a method, the method comprising:

transmitting at least one set of N waveforms from [[the]] a first network location, each transmitted waveform including a waveform characteristic operative to assign a predetermined value relative to other waveforms in the at least one set, such that a predetermined sequence of values are assigned to packets carrying the N transmitted waveforms;

receiving at least one telephonic signal at the second network location via [[the]] a communications channel;

processing the at least one telephonic signal to obtain a received sequence of values; and

comparing the received sequence of values to the predetermined sequence of transmitted values to detect dropped packets without having access to packet switched network control data.

34.   (original) A computer-readable medium having computer-executable instructions for performing a method, the method comprising:

establishing a telephonic connection between a first network location and a second network location; and

transmitting at least one set of N waveforms from the first network location, each transmitted waveform including a waveform characteristic operative to assign a predetermined value relative to other waveforms in the at least one set, such that a predetermined sequence of values are assigned to packets carrying the N transmitted waveforms.

35.   (currently amended) A computer-readable medium having computer-executable instructions for performing a method, the method comprising:

receiving at least one telephonic signal at [[the]] a second network location via the communications channel;

processing the at least one telephonic signal to obtain a received sequence of values; and

comparing the received sequence of values to [[the]] a predetermined sequence of transmitted values to detect dropped packets without having access to packet switched network control data.

36.   (original) The method of claim 35, wherein the step of processing further comprises:

analyzing each received waveform section to extract a received waveform characteristic;

assigning each received waveform section a received value based on the received waveform characteristic; and

generating a sequence of received values based on the step of assigning to obtain the received sequence of values.

37.   (original) The method of claim 35, wherein the step of processing further comprises:

comparing each received waveform section to a plurality of CELP waveform patterns;

assigning a symbol number to the received waveform section based on the step of comparing each received waveform section; and

9

generating a sequence of received values using the symbol numbers of the received waveform sections, to thereby obtain the received sequence of values.

38.   (original) The method of claim 35, wherein the step of processing further comprises:

comparing each received waveform section to a plurality of semantically encoded waveform patterns;

assigning a bit-pattern to the received waveform section based on the step of comparing each received waveform section; and

generating a sequence of section values using the bit-pattern of the received waveform sections, to thereby obtain the received sequence of values.